ECONOMIC INDICATORS

COUNTY PROFILES

HAWAII COUNTY IN 1990

Hawaii County is achieving another year of economic expansion. Gross business receipts were ahead by 14 percent through June; the growth rate for the same period last year was 11 percent. Tourism and construction are the leading sectors.

The Big Island had the highest unemployment rate (4.2 percent) in the State through July. However, the island's job market may be as tight as the other counties. The Big Island has 63 percent of the State's land mass, and the residents of East Hawaii must travel a great distance to the employment opportunities in the visitor industry in West Hawaii. Some travel 150-plus miles round-trip.

The driving force of future aggregate economic growth for the west and east sides of the Big Island are different. West Hawaii has tourism and visitor plant developments. East Hawaii has the future commercial development of abundant, moderately priced lands as its underpinning.

Two concerns appear uppermost this year, the sugar industry's survival and adequate electricity generation. Bad weather is affecting the sugar growers. In addition, Hamakua Sugar is trying to reduce a $90-million debt. The second concern is the rapidly growing demand that continued urbanization and population growth are placing on electric generation capacity. The Big Island needs firm sources of power to meet anticipated growth and to retire older generation systems.

Notwithstanding, Hawaii County is suited for sustained balanced growth. The County has a large supply of land, unlike the other counties. On the west side, Kona and Kohala have established themselves as premier resort destinations. This trend is likely to continue as more luxury hotels come on-line in the near future.

In East Hawaii, Hilo is reawakening as a diversified city. Pluses for Hilo are an international airport and relatively moderate housing costs. The East Hawaii Business Center is helping small businesses get started. The Hilo Mainstreet Program initiated over $7 million in reinvestments for the Downtown area. The University of Hawaii at Hilo is maturing as an institution of higher learning; applications this year were 12 percent greater. Four new programs were started, the Hawaiian Studies Center, Center on Volcanology, Center on Small Business Development and a Marine Biology/Science Program. The University adds approximately $20 million to the economy.

Hawaii County's fiscal budget this year increased by 24 percent to $117 million, the first year the budget surpassed $100 million. Real property taxes increased by 13 percent.

VISITOR INDUSTRY

The Big Island visitor industry has been a healthy performer this year, and this trend for tourism should continue for at least the next few years. Through July, the westbound visitor count was growing at a 5-percent rate to 579,870 visitors; the growth rate through July 1989 was 26 percent. While this year's westbound market is growing at a slower rate, the Big Island is doing well compared to the other counties. Publicity on the island's active volcano and effective industry marketing have helped the island's tourism.

The westbound visitor market is being impacted partly by the weaker national economy. However, the eastbound market, composed mostly of the higher spending Japanese visitors, shows healthy growth. Through July, the Big Island attracted 119,830 eastbound visitors.

Overall, the hotel occupancy rate averaged 64 percent through July, 2 percentage points higher than last year. In Hilo, the occupancy rate was ahead by 7 percentage points to 62 percent. Kona hotels were 69 percent occupied, up by 3 percentage points. The Kohala Coast hotels were down by 2 percentage points to 60 percent.

The Big Island's newest hotel, the Hyatt Waikoloa, completed its first year of operation last year. Operating projections have been met. The hotel expects occupancy to be a little higher this year.

Many vistor-related developments are in West Hawaii. In Kona, the Keauhou Resort is in the midst of upgrading. The resort will use a historic Hawaiian theme to attract visitors. Of the three hotels in the resort, the Kona Lagoon is being transformed into a 309-room all-suite hotel.

At the Waikoloa Beach Resort, 858 acres of land between King's Trail and the Queen Kaahumanu Highway were rezoned from agriculture to urban. This allows the development of the approved 3,000 hotel units and 3,430 multi-family units to be spread over a larger area, reducing the resort's density. At the Royal Waikoloan Hotel, renovations are ongoing. The 122-unit Vista Waikoloa is under construction and should be completed by December 1991. The Kings' Shops, featuring 56,000 square feet of retail space is also under construction. Towne Development's 177-unit condominium has been sold. Also, the Kings' Course golf facility was dedicated this past February.

At the Mauna Lani Resort, the 542-room Ritz-Carlton Mauna Lani is scheduled to open early in December. The hotel expects to have 900 employees initially. In addition, a 100-person child care facility will be made available to the employees of the resort and hotels. At Champion Ridge, an 18-hole putting course is under construction along with

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the infrastructure developments for 33 lot sites. Construction of the Mauna Lani Grove and the Islands at Mauna Lani, a condominium and townhouse project, respectively, should start in early 1991. The existing Mauna Lani Bay Hotel has had an increase in occupancy.

At the Mauna Kea Beach Resort, construction of a 350-room hotel is scheduled to start this year and be completed by fall 1992. The hotel will likely carry the Prince name as it is part of that hotel chain. Construction of a golf course should be completed by year's end and be ready for play by July 1991. The existing Mauna Kea Beach Hotel is experiencing a marginal decline in occupancy.

Barnwell Industries' Kaupulehu Resort is scheduled to open an 18-hole Jack Nicklaus golf course by the end of 1991. Work begins this year on the 358-room Four Seasons Hotel, scheduled to open in 1992, with a planned Princess Hotel expected to follow.

Nansay Hawaii expects to start infrastructure construction in January 1991, for its resort. An 18-hole golf course and two hotels, one with 250 all-suite units, are expected to be ready by mid-1993.

This kind of visitor accommodations growth is raising concerns about the adequacy of the island's labor resource. An estimated 25 percent of the employees working along the Kohala Coast journey from the east side. The County and private sector are subsidizing transportation for many of these workers. The Hyatt operates 5 buses per day to transport its employees to and from Hilo. The County is operating 2 buses from Hilo to South Kohala, via Honokaa and Waimea, geared for the 8 a.m. to 4 p.m. work shift.

Marketing has been the key to tourism success. The island-wide organization, BIG (Big Island Group), is doing a joint promotional campaign, "The Big One," with other visitor industry concerns. In Hilo, tourism has been especially strong. Part of the upsurge is due to Hilo being the gateway to the Hawaii Volcanoes National Park. The Park's visitor count through July was ahead by 9 percent. Destination Hilo and the remodeled Hawaii Naniloa and Hilo Hawaiian hotels have also been active marketers.

A benefit to west side tourism is the $75-million runway lengthening at the Keahole Airport, making Keahole the State's third international airport. Grading is scheduled to start by year's end, and construction should take two years. In addition, a $60-million terminal expansion is being planned to handle the mainland and foreign visitors. Construction is expected to start fall. 1991.

CONSTRUCTION

The island's construction industry is headed for another successful year. Construction activity increased by 66 percent to $155 million through June; last year, the industry was ahead by 12 percent. In the short term, private construction may taper off marginally; total private permits, an indicator of future construction activity, decreased by 2 percent to $209 million through July. On the other hand, public contracts awarded were ahead by 98 percent to $24 million.

Most of the private permits were for residential construction. The Big Island had the lowest average resale prices for single-family homes ($199,072) and condominium units ($159,595) in the state through July. The single-family price increased by 9 percent from last year, suggesting a tight market, however, the condominium price decreased by 4 percent.

Residential/commercial construction. The State and County are working towards creating housing to help satisfy the residents' needs. The State Housing Finance and Development Corporation (HFDC) is planning the Kealakehe Master Planned Community on 900 acres above the Queen Kaahumanu Highway between Kailua-Kona and the Keahole Airport. Construction of an access road through Kealakehe to Mamalahoa Highway should start by the end of the year, and construction of the 300-home phase 1 is scheduled to commence late 1990 or early 1991. Other 1990 HFDC projects include the Milolii Self-Help Program, the Ka La Loa Subdivision and Piihonua Meadows.

The County is planning 1,200 to 1,500 housing units on 300-acres of land in Waikoloa. The master plan draft was to be completed this year and an Environmental Impact Statement next year. Ground work may start next year.

In private housing projects, Waikoloa Highlands in West Hawaii, had an inventory of 736 homes and 678 multi-family units as of May 1990. Current projects will add 360 homes and 248 luxury condominiums. In addition to the residential developments, the Waikoloa Highland Center opens this year, featuring retail and office space.

At North Kohala, Chalon International of Hawaii, Inc. has a master plan for the 19,000 acres of former sugar lands. The company's goal is to maintain a social and economic balance of the area together with a slower lifestyle. The construction of Maliu Ridge phases 2 and 3 and Ainakea phase 2 are scheduled for completion by end of 1991. Chalon is proposing the Mahukona Lodge which would generate 300 to 500 jobs in the area. Chalon hopes to help intensify the livestock operations of its lessees.

W.H. Shipman Ltd. is continuing the development of its industrial park at Keaau. Shipman also is planning to expand the 5-acre Keaau Village Center to 20 acres. Construction of the first 4-acre Hilo-side quadrant should start by year's end.

Infrastructure. The County is planning to accommodate Big Island growth. The Hilo wastewater treatment plant is to be upgraded to secondary treatment standard and to treat 5 million gallons per day (mgd). The plant should be operational by September 1992 and be in compliance with Environmental Protection Agency regulations by March 1993.

The sewage treatment plant at Kealakehe is operating at capacity. A new 2.5-mgd plant is to be constructed to replace the existing plant; completion is set for October 1991. Sewer lines will be extended from the plant to Kahaluu along Alii Drive over the next 5 years.

The County is seeking State approval to expand the Kealakehe landfill. This expansion will extend the use of the landfill by as much as 3 years under existing usage rate.

The County's road resurfacing program got a boost with $2 million being allocated from the fuel tax. In addition, widening of the Saddle Road will continue.

The State Department of Transportation has several road projects. The 2-lane Pahoa Bypass, which connects the roads leading to Kalapana and Kapoho, should be completed by fall 1990. Spot improvements are being made for safety purposes in South Kona on the Belt Road from Honaunau to Milolii. Construction of the Wailua River Bridge is continuing.

AGRICULTURE

The sugar industry is down somewhat, but there are some bright spots in diversified agriculture. The overall agricultural sector generated 6,250 jobs through July versus 6,750 jobs last year.

Sugar. Island production is down marginally to 123,432 tons through July. There are some underlying concerns in that each of the plantations is attempting to maintain its presence on the Big Island.

Hamakua Sugar Company's production for 1990 is expected to increase by 7 percent to 119,000 tons, but this

production is also a 16-percent decrease from 1988's 132,000 tons. Since August 1989, Hamakua has been operating on a 5-day instead of a 7-day workweek; employment has declined by about 300 employees since 1988. The sugar operation has been profitable this year.

Hamakua is being impacted by bad weather and debt. Rainy weather has affected cane harvesting, and the company is selling parts of its sugarcane acreage to reduce debt. In an initial auction, 1,000 acres were sold, which brought less revenue than expected. Hamakua had plans to hold a second auction of 5,000 acres in August. Instead, in a plan worked out with lenders, the State and County, Hamakua will develop a small portion of the intended acreage for sale. This plan will bring a higher return than a distress sale, should be able to reduce most of the company's debt, and will keep a larger acreage in sugar production.

At Hilo Coast Processing Company (HCPC), production this year should equal last year's 72,000 tons. Extremely wet weather has been adversely affecting operations; rainy days have been scattered throughout the year, resulting in numerous workless days. HCPC is being challenged to maintain the acreage of small sugar growers who supply part of its cane, many of whom are facing retirement. HCPC is encouraging others to take the place of the retiring growers. On a brighter note, the efficiency of its mill has increased; in the past, the mill operated below the 85-percent grinding time efficiency level. In the fields, HCPC is switching to a more productive cane variety.

At Ka'u Agribusiness, weather problems are of a different sort. Planting has had to stop momentarily due to extra dry conditions. However, sugar production this year should match last year's at 52,000 tons, and yield should increase from 10.4 to 11.6 tons of sugar per acre as some marginal lands have been phased out. The last 300 acres of a planned 4,000-acre reduction are being taken out of sugar. Ka'u has planted 30 acres of former sugar lands in Valencia oranges; first fruits are expected around 1993.

Maintaining a viable sugar industry is important for the Big Island. Sugar not only preserves a life-style, but Hamakua and HCPC also provide 24 percent of the island's energy by burning bagasse and sugarcane trash in the mills. Without sugar, the Big Island will have to import more of its energy or rely on other forms of generation.

Diversified crops. Diversified crop production has been weakened, partly due to the effects volcanic fog has on crops. However, there are a few bright spots. The papaya industry has been faced with losing its certification of the double-dip fruitfly treatment by the U.S. Department of Agriculture for papaya destined for the U.S. mainland. While the permit of the treatment was extended to January 1992, an alternate prototype dry-heat process was approved, and now a commercial dry-heat plant in Hilo is awaiting certification. This year, the island's papaya production should reach 63 million pounds, a million pounds over the 1989 production; next year, production is expected to reach 68 million pounds.

Macadamia nut growers are feeling the effects of an excess of kernals on the world market. However, producers that sell at the retail level, such as Mauna Loa Macadamia Nut Processing Co. and MacFarms of Hawaii, Inc., are relatively optimistic. At Mauna Loa, all of the nuts from its orchard are used in its processed nut operations. Half of Mauna Loa's orchard is in the maturing phase; production should double in 10 years. At MacFarms, dry weather conditions have caused production to be lower than expected, but total production should still be above last year's.

Kona coffee production last year was solid. Favorable weather conditions resulted in a prolonged harvesting season. This year, however, some farmers are expecting marginally lower production. On the revenue side, the current surplus inventory situation has depressed prices.

Cocoa, the island's newest diversified crop, is doing well. The cocoa beans have been judged to be of relative high quality. The trees at Hawaii Cocoa are 3 years old and will reach maturity in another 4 years.

Sales of Big Island bananas increased by 9 percent to over 3 million pounds. Keeau Bananas, the island's leading producer, has 155 acres in production. Weather kept production down earlier in the year. In guavas, the demand is high, but the supply is down this year. Production last year was about even with 1988 at 2 million pounds.

Livestock. Livestock operations are mixed. The feeding and finishing of cattle and feed costs are general concerns. It is often more profitable for ranchers to send their cattle out-of-state for slaughter due to the economies of scale of many larger outside processors.

At Parker Ranch production is the highest it has ever been due to good weather and more intensive grazing practices. Parker Ranch is shipping its steers and market heifers to Canada for fattening and slaughtering because its packing plant in Honolulu will be closed in 1991 and because of costs. Its first shipment was 2,400 head and it plans to ship 10,000 head in 1991, including yearlings it will buy from other ranches.

Kahua Ranch's livestock operation is doing well. The sheep and cattle herds number 1,800 and 5,000 head, respectively. Overall yield is doing better due to an intensive grazing program.

RESEARCH AND DEVELOPMENT

Gains have been made in this area. At Keahole, the Natural Energy Laboratory of Hawaii (NELH) and Hawaii Ocean Science and Technology (HOST) Park merged, creating the NELH-Authority (NELH-A). NELH was the research arm for startup companies and HOST Park was the commercial and development arm. The administrations were consolidated, and tenants are no longer required to move from NELH to HOST Park upon the commercial viability of their projects. So far, NELH-A has 4 commercial companies, Uwajima Fisheries Inc., Cyanotech Corporation, Royal Hawaiian Sea Farms and Ocean Farms of Hawaii.

In astronomy, NASA awarded a five-year $15-million contract to the University of Hawaii Institute of Astronomy to operate the infrared telescope facility on Mauna Kea. In addition, two telescopes are under construction this year atop Mauna Kea. The W.M. Keck Observatory telescope is scheduled for completion by late 1991. By fall 1990, the first 9 of 36 mirror segments were to be installed. Technicians may then observe the "first light" and test other aspects of the telescope. Ground was to be broken for the $10-million National Radio Observatory telescope; completion is set for next summer.

At Kau, the State has been planning a spaceport for the past several years. A draft Environmental Impact Statement (EIS) is scheduled for completion by early 1991, covering an analysis of the proposed sites, Palima Point and Kahilipali Point. A final EIS will then be done on the selected site. Construction may start in 1992.

ENERGY

The Big Island requires adequate electricity generation to accommodate projected growth. Hawaii Electric Light Company (HELCO) had a 9-percent sales increase for 1989 and expects approximately 6 percent growth for the next 5 years. The peak demand last year was 130.4 megawatts (MW) and the generation capacity was 165.8 MW. In late

1989, a 16-MW combustion turbine was installed at Keahole. For 1992, HELCO is planning a 20-MW combustion turbine at its Puna power plant site to improve the generation service to its customers.

Alternate energy sources currently provide a third of the Big Island's energy. These sources include hydro and wind energy generation as well as the burning of sugarcane biomass. Ormat Energy Systems is under contract to HELCO to provide 25 MW of geothermal generation capacity by mid-1991, with the first 7.5-MW increment due by the end of the year. The geothermal wells for the first 7.5 MW are available; wells for the remaining 7.5 MW still need to be drilled.

True Geothermal Energy Co. is in the exploration stage of developing geothermal energy. They have a well drilled and are working on drilling a second well, making available steam data to study the feasibility of the geothermal resource. True has Land Board authority to develop 100 MW of energy and has Department of Health authority to develop a 25-MW steam field. It also needs Department of Health permission to construct a power plant. True is in the process of negotiating a contract with HELCO; the first increment of power is expected be on-line in 3 years.

Kahua Ranch is working on a pump storage hydroelectric generator utilizing wind energy. One of the pitfalls of wind energy is that it is not a predictable source of power, but wind energy can be used to pump water to a reservoir at a higher elevation. Water can then be released through a hydroelectric generator at peak-load times and stored in a reservoir at a lower elevation, making wind energy a more reliable energy source.

At NELH-A, a 150-kilowatt closed cycle OTEC (Ocean Thermal Energy Conversion) system is being developed. New to the project are aluminum plate heat exchangers, in which warm sea water heats liquid ammonia creating steam to turn a generator.

CONCLUSION

Hawaii County is poised for continued balanced growth. There are several constraints to be addressed, such as the tight labor market and power generation. The availability of land sets the County apart from the rest of the state. The stage is set for Hawaii County to be a large contributor to the economic growth of the State.

Hawaii County Statistics

	Unit	Period	1985	1986	1987	1988	1989	Jan.-July 1990	% change Jan.-July 1990/1989	% change Annual 1989/1988
Population, Resident	number	July 1	109,400	111,200	114,800	117,500	122,300	n.a.	n.a.	4.1
Civilian Labor Force	number	mo. avg.	50,400	51,350	54,050	54,500	56,900	58,450	2.9	4.4
Employment	number	mo. avg.	46,150	47,500	50,950	51,800	54,700	56,000	3.2	5.6
Unemployment	number	mo. avg.	4,250	3,850	3,100	2,700	2,200	2,450	−5.8	−18.5
Unemployment Rate	percent	mo. avg.	8.5	7.5	5.7	4.9	3.9	4.2	−6.7	−21.4
Total Job Count[1]	number	mo. avg.	42,400	43,300	45,600	47,500	51,600	53,550	5.2	8.6
Gross Business Receipts	mil. $	total	1,594.5	1,642.4	1,861.6	2,081.8	2,307.5	1,344.5	13.9	10.8
State Tax Collections[2]	thous. $	total	79,288	92,073	105,468	113,421	113,387	71,412	−5.3	0.0
Visitor Expenditures	mil. $	total	285.9	343.8	381.8	464.2	1,004.8	n.a.	n.a.	116.5
Estimated Westbound Visitors	thous.	total	697.4	786.9	782.4	782.4	946.5	579.9	5.0	21.0
Hotel Inventory	number	February	7,511	7,280	7,328	8,823	8,171	n.a.	n.a.	−7.4
Hotel Occupancy	percent	mo. avg.	57.6	62.2	60.8	56.4	60.8	63.7	2.9	7.8
Construction Put in Place	thous. $	total	81,102	95,769	125,310	162,756	191,675	154,880[3]	65.6[3]	17.8
Private Permits	thous. $	total	121,439	231,501	142,780	181,299	338,502	208,973	−2.3	86.7
Residential Permits	thous. $	total	83,554	69,106	104,002	132,272	219,785	171,605	44.4	66.2
Non-Residential Permits	thous. $	total	37,885	162,395	38,778	49,027	118,717	37,368	−60.7	142.1
Public Contracts Awarded	thous. $	total	18,520	37,717	31,339	69,568	24,416	23,667	98.0	−64.9
Real Estate Resales										
Single Family	number	total	416	565	642	806	961	667	26.8	19.2
Average Price	dollars	cum. avg.	93,775	102,141	114,838	138,734	174,050	199,072	9.3	25.5
Condominium	number	total	93	142	219	273	430	384	67.7	57.5
Average Price	dollars	cum. avg.	97,718	112,546	123,558	123,905	151,332	159,595	−4.3	22.1
Sugar Production, raw sugar 96	thous. tons	total	319	329	291	267	234	123	−0.9	−12.1
Diversified Crops and Livestock	thous. $	total	101,845	113,858	115,906	134,679	146,505	n.a.	n.a.	8.8
Diversified Crops[4]	thous. $	total	79,723	91,876	89,491	105,619	113,813	n.a.	n.a.	7.8
Livestock	thous. $	total	22,122	21,982	26,415	29,060	32,692	n.a.	n.a.	12.5

[1]Refers to number of jobs rather than number of persons employed. Persons with more than one job are counted more than once.

[2]Totals do not include real property taxes.

[3]Compares June, 1990 to June, 1989.

[4]Total crops excluding sugar.

n.a. = not available

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COUNTY PROFILES

KAUAI COUNTY IN 1990

Kauai County has been experiencing another year of healthy economic expansion in 1990. Led by a strong construction industry, and despite a weaker visitor industry performance, gross business receipts were up by 18 percent through September to $713 million. This follows a 3 percent increase in gross business receipts for all of 1989.

Kauai recorded the highest increase in the total job count of all the counties in 1989 for the second consecutive year. The job count rose by 11 percent in 1989 to 26,800 jobs. A large portion of the increase was due to a high number of persons holding multiple jobs. The growth has leveled off this year with the total job count up by 2 percent to 27,200 jobs, the slowest growth of all the counties. Kauai's civilian labor force through September was up by less than 2 percent to 27,950 persons, following a 6 percent increase in 1989. Even though the number of persons seeking employment is up, worker shortages still occur in positions requiring specific technical skills. As a result, the unemployment rate rose in the first nine months from 2.8 percent to 3.7 percent, the largest increase in the state.

Competition among employers for qualified workers is expected to increase as new hotel, construction, and retail positions come on line in 1991. Although Kauai's population has grown twice as fast as the overall state population for the past two years, lack of housing and insufficient infrastructure are seen as major barriers to sustaining further expansion. Alleviating these shortages and upgrading the county's infrastructure will be essential to Kauai's future economic growth.

VISITOR INDUSTRY

Kauai's visitor industry had a good year in 1989. Visitor expenditures were up by 34 percent to $952 million, and the westbound visitor count increased by 9 percent to 1,138,230 visitors. Hotel occupancy was up from 67 percent in 1988 to 71 percent in 1989, the highest occupancy rate of all the Neighbor Islands.

In 1990, the visitor industry experienced a downturn. The westbound visitor count through September was 850,800 visitors, a 2.5 percent decline from the same period last year. Visitors who traveled only to Kauai, the majority of whom were repeat visitors, increased by 9 percent to 196,510 persons. However, this gain was offset by a 7 percent decline in the number of visitors who travelled to Kauai and another island. Kauai's decline in multi-island visitors, who tend to be first time visitors to the state, conforms with the overall decline in the number of first time visitors to Hawaii. Undesirable winter weather conditions, the delayed opening of the Sheraton Princeville Hotel and the statewide hotel strike contributed to the reduced westbound visitor traffic to Kauai in the first half of the year. Visitors from Europe have made a strong showing on Kauai and are expected to continue to be a major visitor market for the island. Eastbound visitors, mainly from Japan, stood at 124,740 persons through September, the lowest of all the counties.

Although hotels around the island continued to do well, the industry is experiencing lower occupancy rates in 1990 than in 1989. Through September, Kauai hotels posted a 69 percent occupancy rate, down from 72 percent in 1989. The Poipu area saw a decline in its overall occupancy rate from 79 percent in 1989 to 75 percent in 1990. However, the area remains one of the stronger Neighbor Island destinations. The Westin Kauai in the Kauai Lagoons Resort reports a 72 percent occupancy rate, up from 67 percent in 1989. The Coconut Coast, which has one third of all visitor rooms, had an overall occupancy rate of 70 percent, down slightly from 71 percent a year ago. The Waimea Plantation Cottages recorded a 74 percent occupancy rate through September, 5 percent higher than 1989.

Kauai's visitor plant inventory stood at 7,251 rooms as of February 1989. This total will grow as several hotel and condominium projects are completed. The newest hotel is the 605-unit Hyatt Regency Kauai at Poipu which opened mid-November. The $200 million project includes an 18-hole golf course, a 15,000 square foot health and fitness spa, and 65,000 square feet of meeting, banquet and outdoor party facilities. The hotel expects to employ approximately 900 people when fully operational.

In the Poipu area, construction of the 220-unit Keoneloa Bay Villas condominium project began in September, after extensive design changes to preserve historic Hawaiian sites on its property. The Sweeney Development project is scheduled for completion in July 1992. Also, construction on the expansion of the Lawai Beach Resort is scheduled to begin in 1991 and will add 60 condominium units to the resort's existing 84 units.

On the north shore, renovations of the Sheraton Princeville Hotel resumed in August after construction ceased last November when the former owners entered into receivership. Renovations will pick up where they left off, and will involve reducing the number of rooms from 300 units to 252 larger units, expanding the pool and installing a new lobby. Construction will also resume on the Prince Golf Course's new clubhouse. All work is scheduled to be completed by April 1991.

Tentative plans for a second hotel at the Kauai Lagoons

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would add 650 rooms to the existing 850 rooms of the Westin Kauai. Together, the 1,500 rooms would provide the added revenue needed to offset the high costs of maintaining the resort's huge infrastructure and amenities. The current owners plan to sell the resort, with the new owners undertaking development of the second hotel.

A joint marketing effort to promote Kauai as a visitor destination has received favorable response. The Princeville Resort Association, Poipu Beach Resort Association, Kauai's Royal Coconut Coast Visitors Association, Hawaii Visitors Bureau Kauai Chapter and the Kauai County Office of Economic Development have agreed to pool their efforts and resources to promote the island of Kauai using the theme "Life on Kauai" as its marketing campaign. The newly formed Kalapaki Bay Association has also joined the campaign this year. The print advertisements which promote Kauai's life-styles and activities generated 17,000 responses in the first six months of the promotion. This promotion will continue in 1991, with $550,000 earmarked for future advertisements.

CONSTRUCTION

Kauai's construction industry is experiencing its sixth straight year of double digit growth. Construction activity on Kauai through September totaled $70 million, 43 percent higher than last year. Private construction permits issued through September indicate construction activity will continue to grow in 1991. Private permits authorized during the first nine months totaled $165 million, a 22 percent increase over last year. Of these, residential permits totaled $111 million, a 9 percent increase in addition to the 53 percent increase in residential permits for all of 1989. The growth in residential construction reflects the tight conditions of Kauai's housing market. The average price of a single-family home increased by 14 percent in 1989 and shot up by another 40 percent through September of this year to $328,702. Condominium prices are also up in 1990 to $177,112, 10 percent higher than 1989. Private residential permits are expected to continue to increase in 1991 to accommodate the demand for housing.

Several housing projects currently underway or in the planning stages will bring some relief to Kauai's housing situation. Grove Farms Company expects to begin construction of the first phase of its 1,600-unit housing project in early 1991. The first of the project's 750 residential units could be available by the end of next year. As part of Grove Farms' master plan for the Puhi area the project will include a golf course, parks, and a school.

Alexander and Baldwin broke ground this past August for the first phase of its 1,738-unit housing and commercial development on the west side of Poipu. The first homes are scheduled to come on line by 1992. Conceptual plans for the second phase include an additional 2,300 residential units, a golf course, a 120-slip marina, commercial space and parks. The entire Kukuiula project will cover 1,036 acres and will take 15 to 20 years to complete.

Several other housing developments will further increase Kauai's housing inventory. In Kapaa, the third and final phase of the Waialeale Estate project by the County Housing Agency is nearing completion. All 241 house and lot packages and vacant lots have been sold. In Hanamaulu, construction of 180 housing units by Amfac/JMB is expected to begin in mid-1991. And on the west side, the State recently broke ground for the first 188 housing units to be built at the Cliffside development in Hanapepe.

The value of non-residential permits authorized in 1989 fell by 68 percent, but shot up by 59 percent through September to $55 million. After completion of the Hyatt, commercial construction will level off. However, shopping center development, resort renovations, and golf course projects should sustain Kauai's non-residential construction industry over the next several years.

Public construction should also help to boost the industry. Public contracts awarded through September soared by 137 percent over last year to $47 million. Major government sponsored projects planned for the next few years include the $59 million expansion of Lihue Airport and the $32 million development of Pier 3 at Nawiliwili Harbor. In addition, construction of a new school in Hanamaulu is nearing completion, and new schools are planned for Puhi, Kapaa and Kilauea. Due to the very high amount awarded this year, Kauai will probably see a decline in the value of public contracts awarded in 1991.

SUGAR

Poor weather conditions in 1989 contributed to another year of reduced sugar production. Total production fell by 8 percent in 1989 to 210,887 tons. Heavy rains and a severe winter storm have kept production in 1990 flat. Production through September was 168,608 tons, up slightly from last year.

The sugar industry received a jolt in October when Lihue Plantation Company announced plans to consolidate its plantation by about 30 percent over the next three years. Despite an estimated increase in production of 14 percent to 61,000 tons this year, heavy losses since 1987 prompted the plantation to cease planting on 3,300 acres located in the Kealia/Anahola area. The consolidation will leave Lihue Plantation with 11,200 acres in sugar. The Kealia/Anahola land has consistently given the company its highest yield, but the transportation distance between the mill and the field made the field inefficient to operate. The last harvest of this area will take place in 1991 or early 1992. The company estimates 75 to 125 positions will be eliminated over the next three years mainly through reassignments and attrition.

Kauai's four other sugar plantations forecast declines in their 1990 production. McBryde Sugar Company which completed its 1990 harvest in September reports a 14 percent decline in production to 46,942 tons, with a slight decline in the yield from 9.5 tons of sugar per acre (TSA) to 9.3 TSA. The Kekaha Sugar Company estimates its production will decline by 7 percent to 47,500 tons. Yields are also expected to slip from 13 TSA to 12 TSA. Gay & Robinson also expects its production to fall by 7 percent to 19,400 tons. The yield will be down from 16 TSA to 15 TSA. The Olokele Sugar Company projects a 13-percent decline in production to 28,000 tons this year, accompanied by a reduction in the yield from 13 TSA to 12 TSA.

DIVERSIFIED AGRICULTURE

Diversified agriculture on Kauai made some gains in 1989. The total value came to $13.3 million, 2 percent higher than 1988. Diversified crops accounted for most of the growth, increasing by 3 percent to $9 million, while livestock values remained at $5 million.

Guava continues to be a promising diversified crop for Kauai. Production of guava puree by Kilauea Agronomics increased by 5 percent to 9 million pounds in 1990. The plantation currently has 330 acres of mature guava trees, and an additional 150 acres in the growing stage. For the second year, Kilauea Agronomics has turned to Micronesian labor to supplement its local work force; they foresee even tighter labor conditions when the Sheraton Hotel opens next year. Kilauea Agronomics' parent company, C. Brewer, recently acquired the Hawaiian Fruit Preserving

Company, for which Kilauea Agronomics is a major guava supplier for the Kukui brand jams, jellies and syrups. The purchase will further strengthen Kilauea Agronomics' position as a major supplier of guava puree for Kukui brand products, and it will expand the overall market of the guava business.

Kauai's flower and foliage industry is emerging as a promising diversified crop. Total sales in 1989 grew by 22 percent to $2.4 million. Sales of cut flowers including heleconias and gingers quadrupled in 1989 to $226,000, an indication of the growth potential of the industry. This year, flower growers report difficulties in fulfilling orders of mainland buyers due to the overwhelming demand for tropical flowers. Recently, as many as 100 different varieties of heleconias were brought back from the jungles of Central America for future propagation on Kauai. The new species will increase Kauai's competitive position on the world market.

Papaya production declined by 41 percent to 970,000 pounds in 1989. This was followed by another 17 percent decline to 670,000 pounds as of September 1990. Papaya growers did receive good news this year, however, when the state legislature appropriated $500,000 to support construction of a $2 million dry air fruit treatment and packing plant to process papayas for export. The remaining $1.5 million will come from private sources. The project is currently in a design stage, and a site has yet to be selected.

The seed corn industry received a setback this year due to a virus that has affected seed corn planted from late 1989 to February of this year. To eliminate the virus, seed companies skipped summer plantings this year. Since Kauai serves as a winter nursery for seed companies, the fallow fields did not severely hurt the companies whose peak seasons are in December and January.

Other experimental crops on Kauai are nearing commercial production. McBryde Sugar Company is making progress with its coffee operations. A joint venture between McBryde and Hills Brothers has resulted in a 100 percent Kauai coffee product that will be test marketed on the mainland beginning in January 1991. The plantation currently has 3,000 planted acres of coffee and expects to have 5,000 acres in coffee by the end of 1991. McBryde estimates its 1990 harvest will reach 350,000 pounds, up from 100,000 pounds in 1989. The company also forecasts a harvest of 1 million pounds for 1991.

McBryde Sugar Company harvested its second macadamia nut crop this year and yielded 72,000 pounds (wet-in-shell) of nuts. The company expects to produce 150,000 to 175,000 pounds in 1991 and 4 million pounds by the year 2000. The nuts are currently sold to processors on the Big Island, but McBryde is considering a cracking plant on Kauai which will be economically feasible once production reaches the 4 million pound level.

MILITARY

Because of its importance as a training facility, the Pacific Missile Range Facility (PMRF) had no military budget cuts this year. PMRF's operating budget for fiscal year 1990 was $40 million, and is expected to increase in fiscal year 1991 to $42 million. The payroll for military and civilian personnel for fiscal year 1990 reached $8 million or 19 percent of the total budget. Approximately 80 percent of the salaries received flowed back into the local economy. Another $6 million in military purchases went to local businesses and contractors.

The base received much attention in 1990 because of the proposed launching of missiles from the Barking Sands facility as part of the "STAR Wars" research program. The controversial project could contribute up to $400,000 a year to the local economy.

RETAIL TRADE

Kauai's retail merchants report slower growth compared to previous years. Retail sales as of this past August were up by 8 percent to $218 million, compared to the 11 percent growth at this time last year. Lower visitor traffic and uncertainties in the national economy are seen as contributing to the reduced sales.

The Kukui Grove Shopping Center, Kauai's largest, reports sales of its three anchor tenants through September were up by 14 percent from last year. However, lower sales of its smaller stores pulled the Center's overall growth down to 4 percent compared to normal sales growth of 14 percent. Kukui Grove, operating at full capacity, wishes to upgrade its stores and has received favorable responses from mainland retailers.

The Coconut Plantation Marketplace, which caters almost exclusively to visitors, is also forecasting slower growth for 1990. Sales at the Marketplace are expected to be up by 3 to 4 percent this year compared to the 9 percent growth in each of the past two years. Operating at 96 percent capacity, the Marketplace is also upgrading its stores and is undergoing physical improvements to its exterior.

Both shopping centers have had added competition this year from the Kauai Village in Waipouli and Anchor Cove in Nawiliwili. The two new centers are doing well in their first year of operation. Several new shopping center developments also are being planned for Kauai. Kukui Grove Shopping Center is planning a 150,000 square foot expansion of the existing center. Adjacent to this, the Kukui Grove Village West will include a commercial complex, a driving range, a home furnishing center and a park. Site improvements for the project were recently completed, and all but one of the 48 lots have been leased. On the north shore, the foundation for the expansion of the Princeville Shopping Center is expected to be in place by mid-1991. This will add 100,000 square feet of retail space to the center's existing 66,000 square feet.

INFRASTRUCTURE

Kauai's rapid economic expansion over the past few years has strained the island's ailing infrastructure system. The increased population and the rise in residential, commercial and resort developments are taking their toll on the county's sewers, solid waste dumps and roads.

With its sewage treatment plants reaching full capacity, Kauai is approaching the point at which development of residential and resort projects could be delayed because of inadequate sewage systems. To help alleviate the situation, the county council passed a $16.5 million bond flotation for capital improvements projects. A portion of the money raised from the bonds will be used to fund 70 percent of the expansion of the Lihue sewage treatment plant. The $10-million project will expand the station's capacity from 1.5 million gallons of wastewater per day (mgd) to 2.5 mgd. Construction is expected to begin in 1991 and will take two to three years to complete. Also, expansion of the Eleele plant will increase the plant's capacity from 400,000 gallons per day to 1 mgd. The $6 million project is needed to accommodate the Cliffside housing project.

The island's solid waste disposal sites are also being over burdened. The Halehaka Landfill in Lihue is already operating at full capacity and will be closed upon completion of the $2.2-million Lihue transfer station in early 1991. The closure will leave the Kekaha Landfill as the island's only public solid waste disposal site. To help reduce

Kauai's trash flow, the county implemented a six-month pilot recycling and composting project this year.

Traffic congestion has increased on Kauai's roads with the number of cars registered on the island up by 37 percent from 37,659 in 1985 to 51,455 in 1989. To help alleviate the congestion, the state is installing a third lane on the Kaumualii Highway between Hanamaulu and Kapaa. Also, repair of the old railroad bridge over the Wailua River will provide an additional lane toward Kapaa. Both projects are scheduled for completion in 1991. The realignment of Nawiliwili Road, along with the installation of traffic signals, should help reduce traffic through Lihue Town. On the south shore, the Poipu-Koloa eastern bypass road will provide another access to the resort area. The $6.8-million project is currently in the design stage, with construction expected to begin in late 1991.

Kauai Electric reports power usage increased by 5 percent in 1989. Usage is expected to grow by 8 to 9 percent for all of 1990 with the peak usage expected in November and December when the Hyatt Hotel opens. Residential usage is also expected to increase as more houses are built. To accommodate future demand, Kauai Electric installed two 7.8- megawatt diesel generators this past October at a cost of $14 million. The utility has plans to install two additional generators in late 1991.

The County's water supply system is also expanding to accommodate future growth. The Department of Water has about $6 million worth of projects under construction or in the planning stages. Storage tanks are being installed in Kekaha, Waimea, Hanapepe, Koloa, Poipu, Lihue, Kapaa and Kilauea. In addition, the County is drilling deep well sources in Kalaheo, Lawai and Haena.

CONCLUSION

Kauai managed to expand economically in 1990 despite a downturn in tourism. Construction, particularly state and county sponsored projects, boosted Kauai's economic performance, while retailing and diversified agriculture held their own. After experiencing robust growth and development in the late 1980s, Kauai is now concentrating on satisfying the need for affordable housing and adequate infrastructure to sustain future growth. External economic conditions suggest continued weakness in tourism for 1991. Kauai will experience moderate growth next year, but at a slower pace than in previous years.

Kauai County Statistics

	Unit	Period	1985	1986	1987	1988	1989	Jan.-Sept. 1990	% change Jan.-Sept. 1990/1989	% change Annual 1989/1988
Population, Resident	number	July 1	45,300	46,200	47,900	49,300	51,000	n.a.	n.a.	3.4
Civilian Labor Force	number	mo. avg.	22,050	23,400	24,900	26,000	27,600	27,950	1.6	6.2
Employment	number	mo. avg.	20,550	22,000	23,850	25,050	26,800	26,900	0.7	7.0
Unemployment	number	mo. avg.	1,500	1,400	1,100	950	800	1,000	33.3	−15.8
Unemployment Rate	percent	mo. avg.	6.8	5.9	4.3	3.7	2.8	3.7	32.1	−24.3
Total Job Count[1]	number	mo. avg.	19,900	21,200	22,450	24,250	26,800	27,200	2.3	10.5
Gross Business Receipts	mil. $	total	599.0	739.2	776.9	777.1	802.6	712.9	16.2	3.3
State Tax Collections[2]	thous. $	total	33,793	43,420	47,454	55,252	56,640	44,540	2.2	2.5
Visitor Expenditures	mil. $	total	407.9	516.9	580.1	712.1	952.3[3]	n.a.	n.a.	33.7
Estimated Westbound Visitors	thous.	total	835.6	1,014.7	1,032.8	1,043.7	1,138.2	850.8	−2.5	9.1
Hotel Inventory	number	February	5,656	5,922	5,956	7,180	7,251	n.a.	n.a.	1.0[4]
Hotel Occupancy	percent	mo. avg.	64.8	76.4	74.2	66.9	71.3	69.2	−4.2	6.6
Construction Put In Place	thous. $	total	30,219	35,959	46,450	56,811	69,872	70,267	42.6	23.0
Private Permits	thous. $	total	63,888	93,475	103,420	213,849	178,688	165,278	21.7	−16.4
Residential Permits	thous. $	total	47,050	42,046	63,742	90,887	138,924	110,549	8.9	52.9
Non-Residential Permits	thous. $	total	16,838	51,429	39,678	122,962	39,764	54,729	59.4	−67.7
Public Contracts Awarded	thous. $	total	15,346	13,065	21,383	23,761	35,655	47,020	136.5	50.1
Real Estate Resales										
Single Family	number	total	90	162	184	200	266	188	−1.1	33.0
Average Price	dollars	cum. avg.	146,375	142,371	149,587	210,761	239,646	328,702	39.6	13.7
Condominium	number	total	78	170	214	265	265	194	−7.2	0.0
Average Price	dollars	cum. avg.	115,987	104,167	123,656	132,846	158,236	177,112	10.1	19.1
Sugar Production, raw sugar 96°	thous. tons	total	242	241	229	228	211	169	0.9	−7.5
Diversified Crops and Livestock	thous. $	total	11,325	11,656	12,337	13,034	13,316	n.a.	n.a.	2.2
Diversified Crops[5]	thous. $	total	6,254	6,452	7,264	8,273	8,556	n.a.	n.a.	3.4
Livestock	thous. $	total	5,071	5,229	5,073	4,761	4,760	n.a.	n.a.	0.0

[1] *Refers to number of jobs rather than number of persons employed. Persons with more than one job are counted more than once.*
[2] *Totals do not include real property taxes.*
[3] *Includes eastbound expenditures for 1989.*
[4] *Compares February, 1989 to February, 1988.*
[5] *Total crops excluding sugar.*
n.a. = not available

RESEARCH DEPARTMENT
NEIGHBOR ISLAND PROFILES
NOVEMBER/DECEMBER 1990

FIRST HAWAIIAN BANK
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SUPPLEMENT TO ECONOMIC INDICATORS

Honolulu County Profile

First Hawaiian Bank Research Department May/June 1991

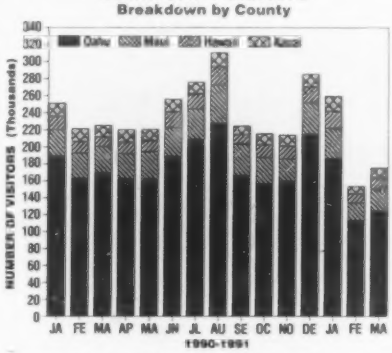
Honolulu County in 1991

Honolulu County entered 1991 on an up note, following eight consecutive years of economic expansion. What looked to be another banner year for Honolulu County was interrupted by the double blow of a national recession and the Persian Gulf War. Overall business receipts for the first quarter reached $9.3 billion, six percent higher than 1990, but substantially lower than the strong growth patterns of the previous years. The visitor industry has been hit the hardest; it saw a slowdown in visitors from the U.S. Mainland as a result of national economic uncertainties, and then a sharp decline in Japanese visitors at the outbreak of war. While tourism's slump has far reaching effects on other sectors of the economy, especially the retail industry, construction activity remains strong.

Oahu continues to have one of the lowest unemployment rates in the nation. Despite the loss of tourism related jobs, Oahu's unemployment rate dropped from 2.8 percent in March 1990 to 2.3 percent this March. Much of the insulation in the unemployment rate stems from the reduction of multiple job holdings and reduced hours worked.

Visitor Industry. Amidst a year featuring a statewide hotel strike, national recession and international conflict in the Middle East, Oahu maintained its spectacular expansion streak in 1990. Total arrivals to Oahu reached 5,350,940 visitors in 1990, a six-percent increase over 1989. All of the growth in traffic stemmed from eastbound visitors, primarily from Japan. The westbound market, hampered by the economic sluggishness of the U.S. Mainland, fell by one percent last year to 3,171,630 visitors. This decline was offset by an 18-percent increase in eastbound arrivals to 2,179,310 visitors.

Eastbound Visitors
Breakdown by County



Last year, Oahu was the destination of choice for Japanese visitors, with 97 percent of all Japanese visitors to the state spending at least part of their vacations on Oahu, and 71 percent visiting only Oahu. By comparison, 35 percent of all westbound arrivals visited only Oahu. While Oahu took comfort in a steady flow of Japanese visitors in 1990, it is now likely to feel the impact of a decline in eastbound arrivals more than the Neighbor Islands. Bookings of Japanese travelers dropped off immediately upon the outbreak of war in mid-January, pushing arrivals from Japan down by 19 percent in the first quarter of this year. This decline, combined with an 11-percent slump in westbound arrivals, resulted in a 14-percent drop in total visitors.

While Oahu took comfort in a steady flow of Japanese visitors in 1990, it is now likely to feel the impact of a decline in eastbound arrivals more than the Neighbor Islands.

Oahu hotels have been hit hard by the absence of visitors. Hotel occupancy rates were off by over 17 percentage points in the first quarter to 74 percent, with occupancy at Waikiki hotels down by over 21 percentage points. The slowdown in visitor traffic forced many hotels to close selected facilities, postpone renovations, reduce worker hours, and in some cases, lay off employees.

Still, capital improvement projects at many Oahu hotels progressed as planned, and work on the 314-room Ihilani Hotel, the first of seven planned for the Ko Olina Resort, remains on schedule. Permits were also issued this year for the construction of the 383-room Kawela Bay Hotel on the North Shore. The renovation projects, along with the new rooms under construction, will expand and upgrade Oahu's visitor accommodations inventory which stood at 37,270 units last year.

The visitor industry received welcome news earlier this year when 45 people were hired to expand the customs inspection staff at the Honolulu International Airport to 146 employees. The staff additions will expedite the the time it takes for foreigners to clear customs inspection. Another step toward facilitating foreign entry into Hawaii will take place this July when construction of a new international terminal gets underway. These events are seen as crucial steps to expanding Hawaii's foreign visitor market.

Construction. The construction industry posted another banner year in 1990, surpassing the $3 billion mark for the first time. Construction put-in-place reached $3.4 billion last year, up by 25

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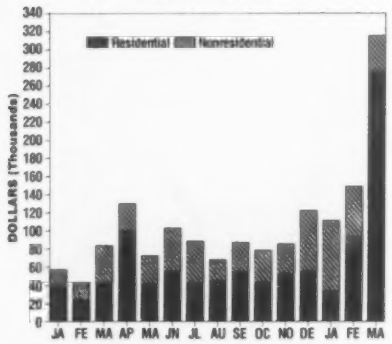
percent from 1989. Strong first quarter figures point to another year of robust construction activity in 1991. Through March, construction put-in-place totaled $910 million, 25 percent above last year's first quarter.

The value of private building

Private Permits Authorized—Oahu
Jan 1990-Mar 1991



permits topped $1 billion last year for a five-percent increase, with residential permits making up all of the growth. For the first quarter of this year, private permits authorized grew by over 200 percent to $578 million.

Most of the construction activity in the coming year is slated to take place on the Ewa Plain and in Central Oahu where residential development will provide a measure of relief for Oahu's housing shortage. Last year, 250 families moved into their new homes at the Villages of Kapolei, and 819 additional housing units are underway or scheduled to begin construction by the end of 1991. In all, the state plans to build 5,000 housing units at Kapolei through the year 2000.

The City and County's West Loch Estates project is nearly 50 percent complete. Of the 1,600 planned housing units, 600 units were completed as of the beginning of this year, and another 120 units are scheduled for occupancy in late 1991. The remaining 900 units will come on line over the next three years.

Plans are also underway to develop 2,800 residential units on the Makakilo hillside by the turn of the century. Five hundred units had been completed as of January, and 650 additional units will become available by the end of 1991. At Ewa by Gentry, most of the planned 2,500 housing units are scheduled to be built by the end of 1992. In Central Oahu, 300 single-family units and 150 rental units of the Royal Kunia project were completed last year. The five-year project calls for a total of 1,550 units to be built.

Nonresidential construction projects in the area include the ongoing development of the Barbers Point Harbor which began receiving container ships last May. The harbor will be supported by the James Campbell Industrial Park, and the new 800-acre Kapolei Business Park which will begin construction in 1992. At the City of Kapolei, ground breaking for the two-building, Campbell Office Block will begin this fall. At the Ko Olina Resort, ground was broken last May on the 394-room Ihilani Hotel, however, ground breaking for the second 1,150-room hotel has been delayed since September.

In addition to developments in Central and West Oahu, Kakaako's transformation from an industrial area to a residential and commercial area is taking shape. Construction of two state housing projects, the Kamakee Vista for small families, and the Pohulani elderly facility, is nearing completion, and work on another 250-unit rental project will begin by the end of December. In addition, the state is developing the 30-acre Kakaako Waterfront Park and installing infrastructure to attract private developers to Kakaako.

The redevelopment of the Aloha Tower area is also beginning to take shape. Ground breaking for the first phase of the six-year development project is expected to take place by the end of this year. Upon completion of a new Maritime Building, the project will expand to include a festival marketplace, office buildings, condominiums, hotels and harbor facility improvements.

Long awaited construction of commercial office buildings is progressing at several project sights throughout Honolulu. In the next two years, 1.3 million square feet of office space are projected to come on line. Sixty five percent of the new space will be in three Downtown projects, the Pan Pacific Plaza, the Alii Place and 1,100 Alakea Street. The additional commercial space will provide relief to Oahu's tight office space market which had a 2.9-percent vacancy rate in March, the lowest in the nation.

The construction industry will continue to be enhanced by public construction projects. Following a six-percent decline in public construction contracts awarded last year, first quarter figures show public contracts awarded up by 185 percent to $252 million. Public transportation projects make up most of the government sponsored construction, thus Oahu motorists can expect to encounter road work throughout the island. In April, work began on the $37-million expansion of Kalanianaole Highway, and on the North Shore, construction of the $18-million Haleiwa Bypass Road commenced last year. At the H-3 Highway site, where $700 million worth of construction remains, work on the first of two tunnels began in April.

At the Honolulu International Airport, now the 10th busiest in the nation, construction activity is progressing on two new separate terminals for interisland and international flights. Additional construction of a cargo terminal, an automated people mover and parking structures will get underway shortly. Work on these projects is scheduled to continue through 1994 at a cost of approximately $2 billion. The new facilities will be needed to accommodate the 45 million passengers predicted to pass through Honolulu annually by the year 2010.

Agriculture. Debate over the future of agriculture on Oahu continues as the county wrestles to meet the needs of an expanding population while preserving its plantation heritage. In 1990 alone, 800 acres at the Oahu Sugar Company's plantation were taken out of agriculture to make way for various residential and commercial developments. The loss resulted in an 11-percent drop in production at Oahu Sugar in 1990 to 76,925 tons. Overall sugar production on Oahu declined by 4.5 percent in 1990 from 146,084 tons to 139,480 tons.

While the production at Oahu Sugar declined, its yield rose from 13.3 tons of sugar per acre (TSA) to 13.7 TSA in 1990, the second highest yield in the state. Oahu Sugar is scheduled to phase out 300 acres in 1991 which would bring the plantation's total acreage to 10,750 acres.

At the Waialua Sugar Company, production grew by four percent to 62,555 tons, while the yield slipped to 11.4 TSA from 11.8 TSA a year ago. Waialua expects to achieve higher yields in the coming years as it

completes its conversion to drip irrigation and switches to higher producing varieties.

Pineapple production dropped for the third consecutive year in 1990. Statewide, production was down by one percent to 575,000 tons, while the farm value of the 1990 crop increased slightly to $99.3 million. Last year, 1,800 acres were taken out of pineapple, including most plantings on the island of Lanai. Since Lanai supplied approximately 80 percent of the state's processed pineapple stock, the impact is being felt on Oahu where cannery jobs fell by 26 percent in 1990. Total jobs generated by the Dole processing plant fell from 1,150 to 850 in 1990, and dropped even further to 650 jobs this March. Dole Packaged Foods has no definite plans for its canning operations once the three-year phase out of Lanai pineapple is completed.

Real Estate. The real estate market is beginning to pick up after experiencing a 16-percent drop in resales of single-family homes and a 13-percent decline in the number of condominium resales last year. Hit by economic uncertainties, sales began declining last May, stalling what appeared to be another year of strong real estate activity. Conflicts in the Middle East compounded the hesitations of potential home buyers to enter the real estate market, and transactions dropped dramatically with the onset of war.

Sales activity in the first quarter of 1991 was down substantially from a year ago. Through March, 278 single-family units were sold compared to 624 units in the first quarter of 1990, a decline of 55 percent. Condominium resales plunged by 63 percent, from 1,439 units last year to 534 units in the first quarter 1991. Despite the declines, realtors are reporting a higher number of pending sales, increased traffic at open houses and more frequent inquiries, all signs of a potential comeback for Oahu's real estate market.

While sales activity has declined and prices now show signs of leveling off, Oahu maintains its status of having the highest priced homes in the nation. The average price of a single-family home jumped by 30 percent to $490,984 in 1990, and fell by 0.4 percent to $470,223 in the first quarter of 1991.

In April, a consortium of 21 financial institutions made available $50 million in long-term, below-market-rate loans to developers willing to build affordable rental apartments. The intent of the program is to stimulate development of homes for low- and moderate-income families, segments of Hawaii's population that have been shut out of the housing market in recent years.

Retail Trade. Oahu retailers did well in 1990 as local consumer spending remained active despite a national recession. Strong Christmas sales boosted gross retail business receipts up by 13 percent in 1990 to $11 billion. In the first quarter of 1991, sales were up by only three percent compared to 13 percent the same time last year. While small retailers, particularly those located in the Windward and Leeward areas, were hard hit by the deployment of military personnel, most major shopping malls performed well in 1990. At Ala Moana Center, the recently completed Palm Boulevard helped boost the mall's sales to $770 million last year for a 16 percent increase. Pearlridge Shopping Center recorded a 14-percent rise in sales, largely attributed to the leasing of a new mix of specialty stores.

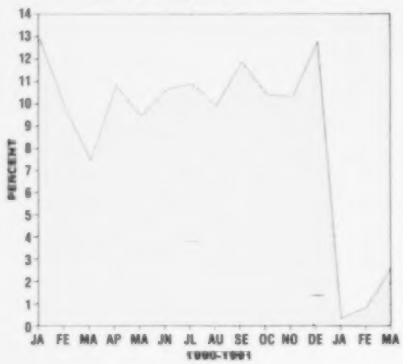
Both malls experienced a drop in traffic during the peak of the Persian Gulf War in January. Ala Moana

Oahu retailers did well in 1990 ... amidst reports of a national recession ... (but) in the first quarter of 1991, sales were up by only three percent.

Center which relies on visitors for over one third of its business, saw sales drop off in February by 10 percent. Meanwhile, Pearlridge, which has a local customer base, managed to post a 4.5-percent gain. For March, an eight-percent increase at Pearlridge and a minimal 1.5-percent decline at Ala Moana leave both malls hopeful that this signals a turnaround for the remainder of 1991.

Other retailers that cater to the visitor industry were impacted by the drop off in tourism. The Royal Hawaiian Shopping Center posted a six-percent increase in fiscal year 1990, however, this was well below the strong double digit growth of 1988 and 1989. The Center attributed the decline to a drop in westbound tourism, the impact of a

12 Month Cumulative Retail Receipts
Percentage Change From Previous Year



22-day hotel strike and the temporary loss of 8 percent of its retail space to renovations. This year, with the sudden absence of eastbound visitors, sales at the center were down by 26 and 22 percent in February and March, respectively. At DFS Hawaii (formerly Duty Free Shoppers), which depends almost entirely on Japanese visitors, business dropped off immediately following the outbreak of war, cancelling the strong growth in the beginning of January.

Oahu's retail inventory space will increase as new neighborhood shopping centers come on line and existing centers undergo expansions and renovations. Earlier this year, the new Wahiawa Town Center and the Kalama Village Center opened. Other malls under construction include Kapolei Shopping Center, Hawaii Kai Towne Center, Aiea Shopping Plaza and Waipahu Towne Center. These convenience centers will provide an attractive shopping alternative to consumers in the surrounding neighborhoods.

Defense. The end of the War brought welcome relief to Oahu as a segment of the approximately 8,400 marines deployed to the Middle East began returning in March. The absence of military personnel and their dependents was particularly felt in Kailua and Kaneohe where businesses lost both customers and employees due to the deployment. With total military expenditures in fiscal year 1990 reaching $2.6 billion, and projected expenditures in fiscal year 1991 pegged at $2.7 billion, the sudden lack of military presence stressed the state's dependence on the military.

As of December 1990, there were 49,826 active duty military personnel (excluding those involved in the deployment), 26,944 civilian personnel, and 67,773 military dependents. The Defense Department's cost-cutting plan announced this April spared Hawaii from any major reduction in military personnel, and actually put Hawaii ahead by 1,246 military and civilian jobs.

The Pearl Harbor Naval Shipyard, with 5,815 workers and expenditures of $272 million last year, continues to be the state's largest industrial employer of civilians. However, the shipyard will lose 293 employees by July, and up to 976 more by September.

Conclusion. Honolulu County, along with the rest of the State, faces an uphill battle for the remainder of 1991 unless tourism recovers soon. Of all the counties, Oahu faces the most severe impact due to its heavy dependence on free-spending eastbound visitors.

Tourism related industries, particularly retail and service businesses, especially will feel the pinch as the lack of visitor spending makes its way through the economy. But other effects are not captured in the frequently watched numbers. For example, falling hotel occupancy rates do not include income losses from discounting room prices. There are other price effects, and some deferment of payments related to slower business.

The bright point for Honolulu will be a wide range of construction activity taking place throughout the county.

None of the above impacts address multiplier effects on the strictly non-tourism sector of the economy. Local businesses serving only residents will also feel the ripple effect of slower tourism.

The bright point for Oahu will be the extensive construction activity taking place throughout the county. Still, construction spending will not be strong enough to sustain recent levels of extremely high economic growth overall for Honolulu County.

Honolulu County Statistics

	Unit	Period	1986	1987	1988	1989	1990	Jan.-Mar. 1991	% Change Jan.-Mar. 1990/1991	% Change Annual 1989/1990
Population, Resident	Number	July 1	819,100	829,000	838,500	841,600	836,231	NA	NA	−0.6
Civilian Labor Force	Number	Mo. Avg.	368,700	383,400	383,750	384,500	393,950	399,383	2.4	2.5
Employment	Number	Mo. Avg.	352,500	369,850	373,150	375,950	384,150	389,983	2.9	2.2
Unemployment	Number	Mo. Avg.	16,200	13,550	10,600	8,550	9,850	9,433	−13.2	15.2
Unemployment Rate	Percent	Mo. Avg.	4.4	3.5	2.8	2.2	2.5	2.4	−14.3	13.6
Total Job Count[1]	Number	Mo. Avg.	379,800	391,800	404,550	421,550	436,650	442,800	2.0	3.6
Gross Business Receipts	Mil. $	Total	22,111	23,618	26,875	30,853	35,510	9,304	6.0	15.1
State Tax Collections[2]	Mil. $	Total	1,422	1,654	1,832	2,112	2,256	628,123	12.0	6.8
Visitor Expenditures	Mil. $	Total	3,444	4,370	6,553	6,636	NA	NA	NA	NA
Estimated Westbound Visitors	Thous.	Total	3,146.0	3,078.5	3,013.9	3,205.8	3,171.6	671.4	−11.2	−1.1
Hotel Inventory	Number	Feb.	39,010	38,185	37,841	36,467	37,270	NA	NA	2.2[3]
Hotel Occupancy	Percent	Mo. Avg.	85.2	86.8	85.4	86.3	86.3	67.7	−25.7	0.0
Construction Put in Place	Mil. $	Total	1,586	1,730	2,164	2,741	3,415	910	24.9	24.6
Private Permits	Thous. $	Total	533,518	754,043	765,234	973,655	1,021,627	576,960	213.2	4.9
Residential Permits	Thous. $	Total	332,934	390,505	429,367	514,046	599,801	404,744	277.5	16.7
Non-Residential Permits	Thous. $	Total	200,584	363,538	335,867	459,609	421,826	172,216	123.8	−8.2
Public Contracts Awarded	Thous. $	Total	312,404	292,689	474,879	601,863	566,383	251,547	185.0	−5.9
Real Estate Resales										
Single Family	Number	Total	2,498	2,773	2,567	2,652	2,229	278	−55.4	−16.0
Average Price	Dollars	Cum. Avg.	212,140	278,296	316,957	376,710	490,984	470,223	−0.4	30.3
Condominium	Number	Total	3,408	4,721	5,538	5,813	5,036	534	−62.9	−13.4
Average Price	Dollars	Cum. Avg.	107,857	126,358	137,449	167,129	228,100	207,532	3.5	36.5
Sugar Production,										
Raw Sugar 96°	Tons	Total	169,357	159,309	140,551	146,084	139,480	1,835	−27.1	−4.5
Pineapple Sales,										
Fresh Equivalent	Thous. $	Total	54,180	52,920	68,261	62,585	NA	NA	NA	NA
Diversified Crops/Livestock	Thous. $	Total	74,300	78,318	76,347	78,245	NA	NA	NA	NA
Crops[4]	Thous. $	Total	29,857	32,664	30,662	32,189	NA	NA	NA	NA
Livestock	Thous. $	Total	44,443	45,654	45,685	46,056	NA	NA	NA	NA

[1]Refers to number of jobs rather than number of persons employed. Persons with more than one job are counted more than once. [2]Property Taxes
[3]Compares February, 1990 to February, 1989 [4]Total crops excluding sugar and pineapple NA = not available p = preliminary

SUPPLEMENT TO ECONOMIC INDICATORS

Maui County Profile

First Hawaiian Bank Research Department July/August 1991

Maui County in 1991

Maui County has experienced an economic slowdown, brought on by global factors beyond its reach as well as its own previous growth. The national recession, compounded by the Persian Gulf War, hit the County's already stalled visitor industry the hardest. At the same time, the construction, real estate and retail industries—which showed positive growth in 1990—began to slow.

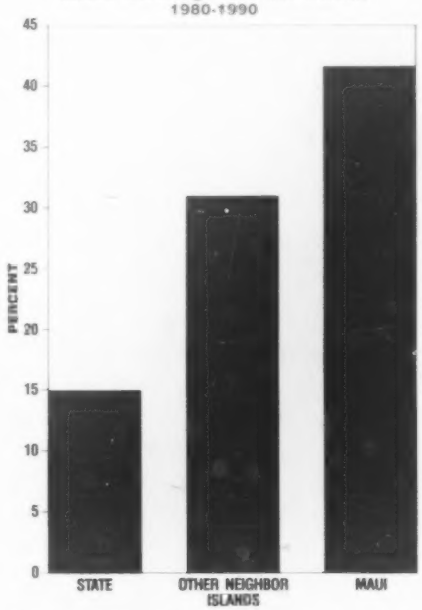
Some of the County's current economic woes can be traced to a population surge over the past decade. According to preliminary 1990 Census figures, the resident population of Maui County grew from 70,847 people to 100,504 people between 1980 and 1990. As Chart 1 shows, this 42 percent increase was well above the average statewide increase of 15 percent, as well as the 31 percent for other neighbor island counties.

This population growth has outpaced Maui's ability to provide infrastructure to support its residents. Thus, considerable strain is being placed on sewage systems, water sources, landfills, roads and schools. This has serious implications for future growth on Maui, and is already impeding housing development.

Despite population growth, labor shortfalls remain for many businesses. The agricultural sector has experienced a steady loss of workers to more attractive hotel jobs. Competition for employees is expected to increase, as two new hotels in Wailea generate up to 2,000 jobs in 1991. The new jobs will provide attractive alternatives to Wailea and Kihei residents who commute to work in West Maui.

Visitor industry. The Persian gulf crisis, coupled with spending caution brought on by a national recession,

Chart 1
Population Growth:
Maui County vs. The State
1980-1990



impacted Maui's already lagging tourism at the start of 1991. The County's visitor industry has made gains in the past two months, but is not expected to turn out a positive year. Through June, total arrivals stood at 1,125,410 visitors, six percent fewer than the first half of 1990.

Even before the peak of the Gulf crisis, the County's visitor industry was in the midst of a downturn. Last year, Maui endured a six-percent drop in westbound arrivals to 1,995,160 visitors, the largest loss of all the counties. Furthermore, Maui saw a two percent decline in eastbound traffic to 394,810 visitors, the only county to experience such a loss. Thus, while the state's overall visitor industry grew by five percent in 1990, Maui County's shrank by five percent.

Even with the decline in visitors last year, Maui hotels managed a 70-percent occupancy rate for a marginal increase over 1989. Through June 1991, however, sparse visitor traffic has driven the occupancy rate down to 63 percent, nine percentage points below the same period last year. West Maui hotels have been hurt most, posting a 12-percentage point loss to 60 percent. Hotels in the Kaanapali area fared slightly better than average, dropping by five points to 72 percent.

Hotels on Maui are expected to face increased difficulties in filling their rooms, particularly in the luxury market. According to most recent estimates, Maui Island had 17,361 visitor accommodation units. This includes the 374 units at the Four Seasons Wailea Hotel which opened in March 1990, and the 787 units at the Grand Hyatt Wailea which is now scheduled to open this September. The luxury resort market will become even more competitive if the Maui Grand Hotel at Kihei adds 267 suites to the inventory in September, followed by 450 suites at the Kea Lani Suites and Villas in Wailea in October. In addition, the Ritz Carlton Kapalua is currently under construction and will add 550 units to Maui's hotel inventory by October 1992.

Hotels on Maui will also have to compete with Lanai's two newest attractions, the two-year old Koele Lodge and the 250-room Manele Bay Hotel, which opened in March. Lanai's fledgling visitor industry is off to a strong start. Through June, 30,780 people visited the island, 36 percent more than last year.

Visitors to Molokai are making a gradual comeback after dropping off during the first four months of this year. However, through June, the total

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visitor count was still down marginally to 52,950 visitors. The hotel occupancy rate through June was well below the state average, falling to 38 percent.

Diversification within the visitor industry will be a key to tourism's success. Maui can enlarge its share of the meetings and conventions market. The island's meeting facilities were greatly enhanced this year when the Maui Inter Continental Resort completed a 34,000-square foot, three-story Conference Pavilion. Later this year, the Grand Hyatt will offer 56,000 square feet of meeting space, including the state's largest ballroom.

With visitors seeking new experiences, Maui's ocean activities industry promises to be a continued draw for tourism. The tour boat industry on Maui has developed with the growth in visitors, and is now quite significant in revenue size and growth, as well as an employer, compared to other industries in the County

A major concern for the visitor industry is the role the Kahului Airport will play in shaping the industry's direction, and thus the County's future. In anticipation of increased visitor traffic, a $42-million section of a new terminal building was completed last year. Work on a second $63-million phase is also underway.

A proposal to extend the airport runway from 7,000 feet to 10,500 feet is also being considered. The extension would allow large aircraft to take off with a full load of fuel, thus eliminating the current practice of refueling in Honolulu. Aircraft would also be able to carry full cargo loads which would help lower the cost of shipping Maui's agricultural products.

Even with the clear economic benefits of runway extension, consideration is also being given to the impact growth will have on infrastructure, and the quality of life for Maui residents.

Construction. Construction activity is expected to remain steady this year, partly due to ongoing hotel construction. But once major hotel projects wind down, the industry is not likely to maintain the substantial growth of the past three years. In addition, Maui's infrastructure shortfall will severely limit the pace at which private construction activity can proceed.

Last year, Maui's construction put-in-place was $260 million, boosting its level by 37 percent over 1989. Through May 1991, construction activity was $121 million, 22 percent above the same period last year.

The value of building permits issued in 1990 increased by 37 percent to $435 million. Growth was concentrated in nonresidential projects, which grew by 110 percent to $226 million. Of this amount, $93 million came from one project, the Ritz Carlton Kapalua. Through June 1991, the value of permits authorized fell by 32 percent to $105 million.

Hotels on Maui are expected to face increased difficulties in filling their rooms, particularly in the luxury market.

Public construction will take up some of the slack created as major hotel projects near completion. In 1990, public construction contracts awarded totaled $153 million, 142 percent above 1989. Through June 1991, contracts tapered off by 10 percent to $34 million, but infrastructure needs could produce more projects throughout the year.

The State Housing and Finance Development Corporation (HFDC) is planning to develop 3,663 units in the Lahaina Planned Community. The first phase of the project will consist of 213 units. Site work is scheduled to take place this fall, with units expected to become available by mid-1992. At the Waiehu Terrace Master Planned Community, the first 50 of 484 planned single-family units were made available to residents earlier this year. An additional 43 units are scheduled to come on line by the end of 1991. Also this year, HFDC completed the 184-unit Honokowai Rental Project.

A major concern for the visitor industry is the role the Kahului Airport will play in shaping the industry's direction, and thus the County's future.

Baldwin Pacific has broken ground on its 785-unit Piilani Village in Kihei. The project will span 187 acres, of which 15 acres will be set aside for commercial use. Marketing of the units should begin in August.

Alexander & Baldwin Properties will complete a 72-unit, low-income rental project in December, and will also begin sales of the 37-lot Haiku Hill subdivision by year end. Approvals are pending for a 100-lot subdivision in Paia and a 50-lot project at Giggle Hill.

Amfac/JMB's 900-unit housing project became the first project to fall under the County administration's Fast Track to Affordable Housing Program. Under this program, projects considered affordable will receive special attention to hasten the approval process.

In Kihei, a 1,050-unit residential development by Gensiro Kawamoto was denied a zoning change due to concerns of overburdening the area's infrastructure. Other planned housing developments in the next few years will be subject to similar constraints.

Various building moratoriums already have been enacted to avoid overburdening infrastructure systems. Last November, concerns over insufficient water led to a ban on the issuance of nonresidential permits in the Central Maui area. Water supply was also the major factor behind a moratorium on new golf course development on Maui. The moratorium was lifted after one year in May. The most recent ban on construction, enacted in March, targets building of new hotels in South and West Maui.

No new water sources have been developed to match the extensive residential, resort and commercial build up over the past decade. Plans are underway to ease the situation, but no new sources are expected to come on line until June 1993, when two wells with a capacity of 3.0 to 3.5 million gallons per day (mgd) are scheduled to be completed.

In Kula, a 100 mgd source is being built under a joint state and county effort. Completion is expected within the next two years. Plans are also being drawn for new water sources in East Maui. The proposed wells would be dug west of Maliko Gulch in Haiku, and would provide a capacity of 8.0 mgd.

Development on Maui is further impeded by insufficient sewage treatment capacity. In Central Maui, the capacity of the Kahului Sewage Treatment Plant will be expanded from

6.0 mgd to 7.9 mgd. The Lahaina Sewage Treatment Plant needs to be upgraded before several proposed residential projects can proceed. In South Maui, the Kihei Sewage Treatment Plant is expected to reach full capacity before 1995, even though a 2.0 mgd capacity was recently added to the plant.

Solid waste landfill facilities are also reaching maximum capacity. The Olowalu Landfill in Lahaina and the Makane landfill in Makawao are expected to be closed in the next two years. In their place, convenience transfer stations will be built, from which the waste will be hauled to the Maui Central landfill which is also nearing full capacity.

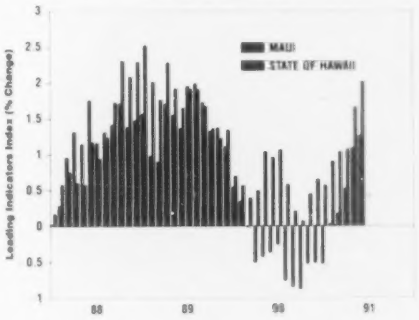
Real Estate. While housing development will be slowed by infrastructure constraints, the added inventory expected to come on line will provide relief to Maui's inflated real estate market. In 1990, the average price of an existing single family unit soared by 41 percent to $421,145, even though sales grew only four percent.

The average price of a single-family home through June, 1991 fell to $333,300, 20 percent below June of last year. The number of resales has also fallen considerably, dropping by 31 percent. Maui's condominium market is following a similar pattern. The average price through June fell by 15 percent to $223,964, while sales of existing units dropped by 65 percent.

Agriculture. Overall sugar production fell by 2 percent in 1990 to 267,271 tons. A major reason behind the decline was that Hawaii Commercial & Sugar Company's (HC&S) crop declined by three percent to 225,555 tons last year, due to damage caused by the corn borer. Production this year is forecasted to improve by one percent to 227,228 tons.

Up to 18 percent of Maui's electric power consumption is generated from bagasse under a new contract between HC&S and Maui Electric Company. HC&S supplies a minimum of 50,000 megawatt hours (mwh) annually, but could provide in excess of 110,000 mwh; HC&S's power sales would then account for 10 percent of its total revenues. HC&S and MECO are investigating installment of a new boiler and generator so that an additional 25 to 30 mwh capacity is available, pending

Chart 2
Maui Leading Indicators vs. The State



Public Utility Commission approval.

Pioneer Mill experienced a four percent increase in sugar production in 1990, with a crop of 41,715 tons. Its yield was also up from 12.7 tons of sugar per acre (TSA) in 1989 to 13.3 TSA last year. This year, harvesting was delayed until June due to a fire in December which destroyed 160 acres of cane, followed by another fire in the boiler room a month later. The two mishaps will result in an estimated loss of 17,500 tons.

Maui County's pineapple industry received a severe blow last September when Castle & Cooke announced the shutdown of the 71-year old pineapple plantation on the island of Lanai. Approximately 9,000 acres of pineapple will be phased out over the next two years. One hundred acres will remain in pineapple to serve the local market and to provide fresh fruit to Lanai's two resorts. The phaseout is expected to be completed by 1993. All 366 Lanai pineapple workers have been guaranteed jobs at Castle & Cooke's resorts or with the company's diversified agriculture operations.

Maui Pineapple Company recorded a lower volume of case sales in 1990, but higher prices boosted revenues for the year. At Wailuku Agribusiness, problems associated with the switch from sugar to pineapple in 1986 are still being worked out. Production is below the industry average, but the company expects to eventually surpass the average because all 2,200 acres are totally drip-irrigated.

Maui's diversified agriculture industry had steady growth in 1990. With high outputs from Molokai farmers, Maui County is still Hawaii's largest producer of vegetables and melons. Total 1990 production grew eight percent to 45 million pounds, over half of the state's vegetable and melon output. Sales last year were up by 16 percent to $13.5 million, or 40 percent of the state's farm revenue.

Pioneer Mill recently completed the first harvest of its 100 acres of experimental coffee, while on Molokai, Coffees of Hawaii will be ready to harvest its first crop by next year.

Retail Trade. Maui retailers have felt the effects of the drop in visitor traffic. Through May, gross business retail receipts stood at $349 million, down 13 percent from the same period last year. In the first five months of last year, Maui retailers were enjoying a 12 percent increase.

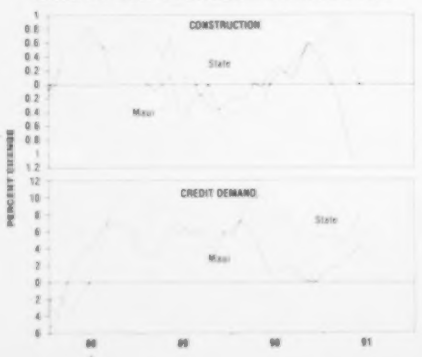
Retailers in Central Maui escaped the fallout of the visitor decline and national recession due to continued spending by local consumers. The Kaahumanu Center had its third consecutive year of double digit growth in 1990, but expects slower growth for 1991. Nearby, the Maui Mall is planning a 50,000-square foot expansion.

In West Maui, the Lahaina Cannery Shopping Center had a significant drop in tourist traffic. It has also observed more conservative spending by tourists who did visit the mall.

In Kihei, construction has resumed on the second phase of Azeka Place Shopping Center. Phase II, which is expected to be completed in October 1991, will add 65,500 square feet of retail space to the center.

High Technology. The Maui Research and Technology Park will begin operating by November 1991.

Chart 3
Maui vs. State Construction and Credit Demand Indicators



Phase I will house the Maui Research and Technology Center, a 40,000-square foot building which will be an incubator center and phase-in facility for small high tech research and information-oriented businesses. A second facility under construction is the 48,000-square foot Premier Place. The major tenant of Premier Place will be Rockwell Power Systems, a subsidiary of Rockwell International, which has a five-year contract to operate the Air Force Observatory on Haleakala. Negotiations are also underway with potential developers of two other lots.

Lagging visitor traffic and a construction industry hampered by poor infrastructure support will mean slower growth for Maui.

The Outlook. According to First Hawaiian Bank's leading economic indicators, shown in Chart 2 and designed to predict the economy 5 to 10 months in advance, Maui's economy grew with the rest of the state in the late 1980's. Maui's leading index then tapered off in 1990, while the state as a whole registered lower but still positive readings. Maui is still feeling the impact of the slowdown its leading index was predicting last year, but it can take some comfort from the gradual upswing in the County's leading indicators since the beginning of 1991.

Still, lagging visitor traffic and a construction industry hampered by poor infrastructure support will mean slower growth for Maui. This slower future growth is suggested especially by the two important components of the Maui leading index shown in Chart 3—those reflecting future construction activity and County credit demand. These share much responsibility for lower overall performance of the Maui index relative to the state as a whole recently.

The next few years will be catchup years for Maui. The County now turns to managing the impacts of the spectacular economic expansion of the past decade, while balancing future growth to protect Maui's quality of life.

Maui County Statistics

	Unit	Period	1986	1987	1988	1989	1990	Jan.-June 1991	% Change Jan.-June 1990/1991	% Change Annual 1989/1990
Population, Resident	Number	July 1	87,000	90,300	93,000	97,200	100,504	NA	NA	3.4
Civilian Labor Force	Number	Mo. Avg.	48,600	51,600	52,750	55,550	57,700	59,000	3.5	3.8
Employment	Number	Mo. Avg.	46,050	49,350	51,000	54,100	56,050	57,250	3.3	3.6
Unemployment	Number	Mo. Avg.	2,550	2,250	1,750	1,450	1,550	1,800	18.0	8.3
Unemployment Rate	Percent	Mo. Avg.	5.3	4.4	3.3	2.6	2.8	3.1	0.3[1]	0.2[1]
Total Job Count[2]	Number	Mo. Avg.	42,500	45,150	48,100	51,900	55,050	55,250	1.8	6.0
Gross Business Receipts	Mil. $	Total	1,842.6	1,816.3	2,100.1	2,143.0	2,548.4	1,057.8	1.6[3]	18.9
State Tax Collections[4]	Thous. $	Total	101,409	117,917	127,966	147,853	146,133	81,356	17.2	–1.2
Estimated Westbound Visitors	Thous.	Total	2,001.9	1,908.8	1,884.1	2,113.1	1,995.2	933.9	–7.3	–5.7
Hotel Inventory	Number	Feb.	14,096	13,849	15,168	16,008	18,169	NA	NA	13.5
Hotel Occupancy[5]	Percent	Mo. Avg.	81.5	76.2	73.4	69.2	70.1	62.7	–13.0	0.9[1]
Construction Put in Place	Thous. $	Total	92,586	100,731	145,706	190,407	260,318	120,696	21.6[3]	36.7
Private Permits	Thous. $	Total	153,047	163,788	408,508	317,902	435,191	105,107	–31.6	36.9
Residential Permits	Thous. $	Total	104,749	106,743	175,650	210,377	208,977	68,612	–31.5	–0.7
Non-Residential Permits	Thous. $	Total	48,298	57,045	232,858	107,525	226,214	36,495	–31.7	110.4
Public Contracts Awarded	Thous. $	Total	58,738	25,454	96,748	63,297	153,333	33,794	–9.9	142.2
Real Estate Resales										
Single Family	Number	Total	386	435	501	509	529	201	–30.7	3.9
Average Price	Dollars	Cum. Avg.	176,211	191,260	244,589	299,048	421,145	333,300	–20.4	40.8
Condominium	Number	Total	669	848	1,064	1,131	1,308	249	–64.6	15.6
Average Price	Dollars	Cum. Avg.	142,532	145,580	175,913	202,894	250,275	223,964	–15.1	23.4
Sugar Production, Raw Sugar 96°	Thous. Tons	Total	303	300	293	272	267	62[3]	–10.9	–1.8
Pineapple Sales, Fresh Equivalent	Thous. $	Total	45,540	46,366	39,141	32,863	NA	NA	NA	NA
Diversified Crops/Livestock	Thous. $	Total	31,358	33,451	32,600	33,282	NA	NA	NA	NA
Crops	Thous. $	Total	19,607	22,860	23,437	25,024	NA	NA	NA	NA
Livestock	Thous. $	Total	11,751	10,591	9,163	8,258	NA	NA	NA	NA

[1]Incremental change. [2]Refers to number of jobs rather than number of persons employed. Persons with more than one job are counted more than once. [3]Compares May 1990 to May 1991 [4]Totals do not include real property taxes [5]For Maui Island only NA = not available

SUPPLEMENT TO ECONOMIC INDICATORS

Hawaii County Profile

First Hawaiian Bank Research Department September/October 1991

Hawaii County in 1991

Hawaii County is in the middle of its eleventh consecutive year of economic expansion. Like the rest of the state, the Big Island did feel the combined impact of the national recession and the Persian Gulf War. Yet it has managed to remain ahead of the other counties in most major industries. Gross business receipts for the first six months of 1991 reached $1.4 billion, seven percent higher than the first half of 1990. Statewide, gross business receipts were up by only three percent.

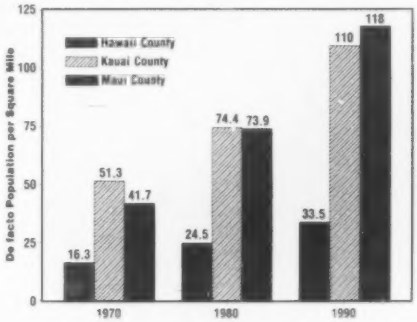
The Big Island was the focus of worldwide attention because it was in the path of the total solar eclipse in July. Although immediate economic benefits fell short of many people's expectations, the one time event should continue to generate valuable publicity for the Big Island, just as the ongoing eruption of Kilauea has done. Not only will this attention benefit the island's visitor industry, but it will also bring international exposure to astronomy operations on Mauna Kea.

While the Big Island has sustained growth in many sectors, it does face some of the same constraints which are threatening growth throughout the rest of the state. Over the past decade, the island's resident population grew by 31 percent to 120,317 people.

The relative size of the Big Island reduces concerns about high population density that have been an obstacle to growth for other counties. As Chart 1 shows, compared to the other Neighbor Island counties, the Big Island's population density has remained low despite its recent high population growth.

However, providing adequate public services such as schools, hospitals and police and fire protection to such a dispersed population has presented another dilemma. Furthermore, the island's larger land mass increases the cost and logistics of upgrading infrastructure systems needed to support new developments.

Chart 1
Population Density: Neighbor Island Counties



Sufficient employment opportunities have not followed demographic trends or the location of the population. An estimated 300 East Hawaii residents commute to work daily to West Hawaii. The County's unemployment rate increased from 4.1 percent in June 1990 to 5.0 percent this June. Although this was the highest rate in the state, the labor situation remains tight for many Big Island businesses, especially in the hotel, construction and agriculture industries.

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Visitor Industry. The Big Island's visitor industry received a welcome boost in July due to the publicity generated by the eclipse. However, while most hotels and car rental companies were sold out during the event, many businesses saw a drop in patronage immediately afterwards.

Calculations indicate that the eclipse may have injected about $7 million directly into the Big Island economy, less than some previous projections but still substantial. After multiplier effects are added, the impact could total as much as $25 million, and this is still only the short-term estimate. Intangible effects of the publicity and exposure the Big Island received will be felt far into the future.

The number of visitors to the Big Island in July 1991 reached 122,650 people, 15 percent above last July. This large increase in visitor traffic boosted the County's cummulative seven-month total visitor count by two percent to 711,920. The Big Island was the only county to record an increase in visitors through July 1991. Also during this period, the Big Island had the largest increase in eastbound visitors (seven percent), and the only increase in westbound visitors (one percent).

Even before the eclipse, the Big Island's visitor industry was doing well in relation to the rest of the state. Chart 2 compares cumulative net gains in the first seven months of 1991 over the same period in 1990 for Hawaii County versus the rest of the state. Through June 1991, the percentage change in visitors to the Big Island was about even with the first half of last year, compared to the statewide average decline of over seven percent. July's eclipse put the County solidly in the positive territory.

Hotel occupancy in July averaged 66 percent, 10 percentage points above

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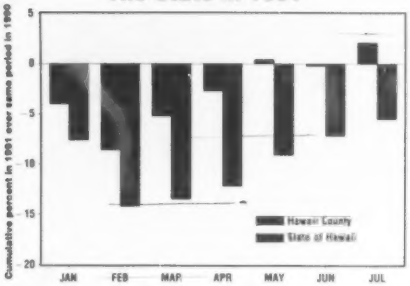
last July. Hotel occupancy for 1990 was 62 percent. Before the eclipse, hotel occupancy through June 1991 averaged 58 percent, seven points below the same period last year.

According to most recent estimates, the Big Island has 8,952 visitor accommodation units. This inventory will increase as new hotel developments come on line, particularly in the South Kohala area.

The most recent addition to the hotel inventory was the 542-room Ritz Carlton Mauna Lani, which opened in December 1990. The new hotel is part of the planned Mauna Lani Resort expansion, which also includes the recent $20-million refurbishment of the Mauna Lani Bay Hotel and Bungalows. Residential projects underway in the resort area include Champion Ridge (33 home sites), Point Estates (19 properties) and The Cape (14 lots).

At the Mauna Kea Beach Resort, a 500-acre resort and residential community is already underway. An 18-hole golf course is expected to be completed by mid-1992, and a 350-room hotel is scheduled to open in 1993. Construction of a 42-unit condominium is scheduled to begin by the end of 1991.

Chart 2
Cumulative Percent Change in Visitors, Hawaii County vs. The State in 1991



Work on the 538-room Four Seasons Hotel began slowing down in December due to difficulties in obtaining financing in Japan, brought on in part by the Persian Gulf Crisis. Construction began in October 1990 and was then expected to be completed in 1992.

Extension of the runway at Keahole Airport from 6,500 feet to 11,000 feet is expected to favorably impact tourism. The extension will allow jumbo jets to takeoff with full loads of fuel, thus accommodating international flights and those beyond the West Coast. Construction will begin later this year, with completion scheduled for 1993.

Kilauea volcano continues to be a major attraction for visitors. Through July, 1991, visitors to the Volcanoes National Park increased by 10 percent to 1.6 million people. A 33 percent increase in attendance in July 1991 over July 1990 was attributed to the eclipse. Hilo has benefited from the steady influx of visitors headed to the Park. In particular, eastbound visitors to Hilo increased by 31 percent in the first seven months of 1991.

Construction. Construction is expected to remain strong this year, especially in West Hawaii where various master planned communities are being developed. Last year, construction put-in-place totaled $357 million, 83 percent more than 1989. This was the largest increase in the state. Through June, construction put-in-place was up by 20 percent over the first half of 1990 to $186 million.

This trend is expected to continue through 1991 and into 1992. The value of private building permits issued in 1990 increased by 25 percent, and was up by 19 percent through July 1991 compared to the first seven months of 1990. Public sector construction will also remain strong as the need for infrastructure systems to support new development increases. Public contract awards in 1990 were up by 127 percent to $55 million, but down by 5 percent through July 1991 over the first seven months of last year. The industry accounted for 3,250 contract construction jobs in 1990, 30 percent more than 1989.

The largest residential project now underway is the Kealakehe Master Planned Community by the State Housing Finance and Development Corporation (HFDC). Infrastructure work on the first phase, Villages of Laiopua, began in August. Construction of the first 176 units will begin in March 1992. Other HFDC projects scheduled in 1991 are the 37-unit Piihonua Meadows, and 15 units of the Milolii Self Help Program.

At the County's 1,400-unit housing project in Waikoloa, the first phase–Paniolo Estates–broke ground in July. Delivery of the first of 177 houses, which will be developed by Jim Schuler, could begin by December 1992.

Nansay Hawaii received approval to develop the remaining 1,270 units of the County housing project over the next five years. Nansay expects to begin work on the infrastructure by early next year, and plans to deliver the first homes by the end of 1992.

Nansay Hawaii is involved in several other projects. The Kohanaiki Resort will consist of 700-800 residential units, three hotels and a golf course. Plans for the Puako Residential Golf Community call for 2,000 residential units and six 18-hole golf courses. Initial construction of both projects could begin in 1992, pending County approval.

In North Kohala, Chalon International of Hawaii, Inc. is working on 70 housing units at Aina Kea Village II. The affordable housing project is part of Chalon's master plan for 19,000 acres near Mahukona Park. The plans also call for a hotel, a golf course and other residential development. In Waimea, Parker Ranch is planning to develop 1,000 housing units as part of its 2020 master plan for the area.

On the nonresidential side, construction and expansion of various shopping centers point to continued growth of the retail industry. In Waikoloa, the $10-million King's Shops is expected to be completed by December 1991. Construction of Phase II of the Lanihau Center in Kona is scheduled to begin this fall at a cost of $65 million. Also this year, work on the West Hawaii Automall is expected to get underway. The $32-million project will begin taking occupants by mid-1992. At the Keauhou Shopping Village, a 13.6 acre expansion will double the size of the existing facility. Site work for the project is already underway.

Longer term, a plan by the Queen Liliuokalani Trust may more than double the existing commercial and industrial space of Kailua-Kona immediately north of the town. In addition to office and light industrial space, the project includes a hospital, shopping center, hotel and government center. State approval has been obtained, and pending County approval, construction could begin in late 1992, extending over a number of years.

Agriculture. After enduring record rainfall for the past two years, Big Island sugar planters received some relief in 1991 as weather conditions

improved slightly. Through July 1991 the combined production of three plantations was down by 19 percent to 100,129 tons. In 1990, sugar production fell eight percent below the 1989 harvest to 215,524 tons.

Hamakua Sugar Company's production is expected to reach 105,000 tons this year, a slight improvement over 1990. Hamakua's major concern is the sale of 8,000 acres needed to pay off nearly $100 million in debts. The company has purchase agreements on almost all the land it intends to sell, and anticipates it will receive the needed revenue by the end of 1991.

At the Hilo Coast Processing Company (HCPC), extremely wet weather in 1990 resulted in the loss of 104 work days, sending production for the year down by 18 percent to 58,075 tons. Improved weather conditions this year will contribute to an expected production increase of nine percent to 63,122 tons. To improve efficiency and reduce losses, HCPC will remove 2,000 acres from cultivation.

At Ka'u Agribusiness, the last 300 acres of a 4,200-acre phase down were taken out of sugar earlier this year. After a very dry year in 1990, improved weather conditions are expected to contribute to a 1991 harvest on par with last year's production of 50,149 tons. Yield is expected to increase from 11.2 tons of sugar per acre (TSA) in 1990 to 12.2 TSA this year.

The eclipse was just one of the recent milestones for the international observatory complex on Mauna Kea. . . . By the year 2000, total capital investments in 13 telescopes on Mauna Kea will near $1 billion.

Diversified agriculture was also affected by the wet weather and some crops continue to be impacted by volcanic fog from Kilauea. Production of vegetables and melons in 1990 fell by eight percent to 29 million pounds. This was the industry's third consecutive annual decline. A reduction in the number of vegetable farmers and a shortfall in farm labor point to continued declines in 1991.

The Big Island accounted for 48 percent of the state's sales of flowers and nursery products last year. Higher prices resulted in record sales of $34 million, despite lower production. A bacterial blight continues to hamper anthurium growth, but the industry should see a turnaround in the next few years as growers adopt new growing techniques and use varieties which are less susceptible to the blight.

Fruit growers also had record farm revenues of $19 million in 1990, three percent above 1989. Papaya sales reached $14 million, or 78 percent of the Big Island's fruit sales. Papaya production continues to be affected by a combination of heavy rains and flowers which fall before fruits have a chance to develop. Sales of bananas dropped slightly to $2.4 million due to a reduction in acres harvested.

Avocado production was down by 18 percent to 900,000 pounds last year. Last October, a 44-year export ban on Hawaii-grown avocados was lifted. Since the initial shipments, avocado exports have been delayed due to a fire in the packaging plant.

Kona coffee prices are lower this year due to surplus inventory and record production in 1990. Production in 1991 will be lower due to poor weather conditions. The 1990-91 macadamia nut crop was 50 million pounds (net, wet in shell). Unfavorable market conditions and excess kernels in the world market pushed prices down from 89 cents to 82 cents.

Science and High Technology. For the first time in history, a total eclipse occurred directly over the world's most powerful astronomical observatory, drawing scientists, astronomers, visitors and the media to the Big Island. Aside from the immediate benefits from the actual event, the larger benefits will come in the form of continued international publicity for the astronomical community and for the Big Island.

The eclipse was just one of the recent milestones for the international observatory complex on Mauna Kea. In the past two years, plans for five new telescopes have been announced. By the year 2000, total capital investments in 13 telescopes on Mauna Kea will near $1 billion. Total operating expenses could reach $50 million a year, a large proportion of which will find its way into the local economy.

The National Astronomical Observatory of Japan will begin building a $250-million telescope next year. The facility will employ 40 workers and generate $4 million a year in maintenance and payroll costs.

The W.M. Keck Foundation also announced plans to fund construction of a second 10-meter telescope on Mauna Kea. The $93-million Keck II scope will be adjacent to its $94-million twin which is already under construction. The two telescopes will require a staff of 50 people and will have an estimated annual operating budget of $7.5 million.

Steady visitor traffic, rapid resort development, robust construction activity and a booming population have provided the County with the fastest growing economy in the state.

Mauna Kea has received commitments for three other telescopes: (1) a $40-million telescope by the Smithsonian Institution, (2) the $85-million Northern Telescope to be built jointly by Great Britain, Canada and the United States, and (3) the $25-million Italian Galileo Telescope. Annual operating budgets for the three projects, which are separate, are estimated at $8 million.

In Keahole, the Natural Energy Laboratory of Hawaii Authority (NELHA) is leading the way in energy research and salt-water aquaculture. Currently, six commercial ventures at NELHA produce or grow salmon, oysters, abalone, flounder, fish jerky, spirulina, beta carotine and kelp. In addition, NELHA has ten research and demonstration projects dealing with scallops, oysters, pearl oysters, tilapia, sea urchins, sea slugs, mahimahi, lobster, slant drilling, freon recycling, molasses to ethanol, materials testing and ocean thermal energy conversion.

The state expects to complete an environmental impact statement for a proposed spaceport in Kau by early 1992. Two sites are being considered for the spaceport - Kahilipali Point near Naalehu and Palima Point near Pahala.

Energy. Hawaiian Electric Light Company (HELCO) had an eight percent sales increase in 1990, and

predicts a 4 percent increase this year. Demand is expected to increase by five to six percent a year through 1995.

Rolling blackouts in mid-1991 demonstrated the heavy demands being placed on the island's electric generation capacity by development. These incidents follow a year in which the average HELCO customer experienced nearly nine outages. This underlines the need to upgrade existing energy generation capacity and develop alternate energy sources.

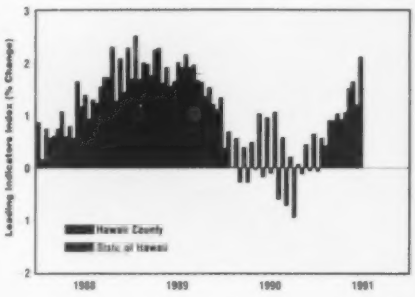
Alternative energy development received a temporary setback in July due to a steam explosion at the KS-8 geothermal well in Puna. The mishap stalled plans by Puna Geothermal Venture to provide 25 megawatts of power to HELCO by the end of 1991. Continued drilling and other operations have been halted by the County until the health, welfare and safety of the surrounding community can be assured.

In Keahole, construction of an open-cycle ocean thermal energy conversion (OTEC) demonstration plant will begin by this fall. Production is expected to get underway by fall 1992. A closed-cycle OTEC plant is scheduled to come on-line in 1994.

Outlook. The short-term outlook for the Big Island is bright. Chart 3 compares First Hawaiian Bank's index of leading economic indicators for the County against the same series for the entire state. The Big Island's leading index was signaling economic weakness last year—not so serious a slump as for Maui but a bigger one than Oahu's or Kauai's index showed then. Since, however, the Big Island's leading indicators have paced the rebound for the state.

The Big Island is following a pattern of economic expansion similar to one Maui experienced a decade ago. Steady visitor traffic, rapid resort development, robust construction activity and a booming population have provided the County with the fastest growing economy in the state. However, the Big Island is also experiencing similar obstacles to balanced growth—

Chart 3
Hawaii County Leading Indicators vs. the State



inadequate infrastructure, a mis-match in employment opportunities, lack of affordable housing and a heavy dependence on tourism.

The Big Island has not reached the point at which the County cannot support and maintain growth. The County is thus in a position to continue its economic expansion, while it attempts to minimize the impacts of rapid development.

Hawaii County Statistics

	Unit	Period	1986	1987	1988	1989	1990	Jan.-July 1991	% Change Jan.-July 1990/1991	% Change Annual 1988/1990
Population, Resident	Number	July 1	111,200	114,800	117,500	122,300	120,317	NA	NA	-1.6
Civilian Labor Force	Number	Mo. Avg.	51,350	54,050	54,900	57,200	61,550	64,694	6.3	7.6
Employment	Number	Mo. Avg.	47,500	50,950	52,200	55,000	59,200	62,064	6.4	7.6
Unemployment	Number	Mo. Avg.	3,850	3,100	2,700	2,200	2,350	2,614	2.8	6.8
Unemployment Rate	Percent	Mo. Avg.	7.5	5.8	4.9	3.8	3.8	4.0	0.2[1]	0.0[1]
Total Job Count[2]	Number	Mo. Avg.	43,300	45,600	47,500	52,000	57,200	59,036	4.9	10.0
Gross Business Receipts	Mil. $	Total	1,642.4	1,861.6	2,081.8	2,307.5	2,758.7	1,433.2	6.6[3]	19.6
State Tax Collections[4]	Thous. $	Total	92,073	105,468	113,421	133,387	134,204	93,253	30.6	0.6
Estimated Westbound Visitors	Thous.	Total	786.9	782.6	782.4	946.5	982.7	598.7	1.3	3.8
Hotel Inventory	Number	Feb.	7,280	7,328	8,823	8,161	8,952	NA	NA	9.7
Hotel Occupancy	Percent	Mo. Avg.	62.2	60.8	56.4	60.8	61.7	58.6	-5.2[1]	0.9[1]
Construction Put in Place	Thous. $	Total	95,769	125,310	162,756	191,675	350,810	186,072	20.1[3]	83.0
Private Permits	Thous. $	Total	231,501	142,780	181,299	338,502	422,830	248,292	18.8	24.9
Residential Permits	Thous. $	Total	69,106	104,002	132,272	219,785	264,975	205,867	20.0	20.6
Non-Residential Permits	Thous. $	Total	162,395	38,778	49,027	118,717	157,855	42,425	13.5	33.0
Public Contracts Awarded	Thous. $	Total	37,717	31,339	69,568	24,416	55,442	22,482	-5.0	127.1
Real Estate Resales										
Single Family	Number	Total	565	642	806	961	1,093	391	-41.4	13.7
Average Price	Dollars	Cum. Avg.	102,141	114,838	138,734	174,050	199,017	196,063	-1.5	14.3
Condominium	Number	Total	142	219	273	430	583	138	-64.1	35.6
Average Price	Dollars	Cum. Avg.	112,546	123,558	123,905	151,332	156,630	166,725	4.5	3.5
Sugar Production,										
Raw Sugar 96°	Thous. Tons	Total	329	291	267	234	216	100	-18.9	-8.0
Diversified Crops/Livestock	Thous. $	Total	113,858	115,906	134,679	146,505	NA	NA	NA	NA
Crops	Thous. $	Total	91,876	89,491	105,619	113,813	NA	NA	NA	NA
Livestock	Thous. $	Total	21,982	26,415	29,060	32,692	NA	NA	NA	NA

[1]*Incremental change.* [2]*Refers to number of jobs rather than number of persons employed. Persons with more than one job are counted more than once.*
[3]*Compares June 1990 to June 1989* [4]*Totals do not include real property taxes* *NA = not available*